

Exploring Academic Stressors of Collegiate Students after the Covid-19 Pandemic

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Abstract

Various stress factors may affect college student's mental health, but academic stress may be the most significant. The coronavirus disease 19 (COVID-19) pandemic may make the stress response more difficult for specific student groups than others, leading to differential stress levels. We surveyed 294 college students via Google Forms to see if academic stress levels impacted their mental health and, if so, whether there were any particularly susceptible groups based on gender and educational level. Using the Perception of Academic Stress Scale (PAS), we found that 69 (23.47%) students (14 males (20.3%) and 55 females (79.7%)) experienced academic stress. Furthermore, using Exploratory Factor Analysis (EFA), four factors such as academic confidence, examination expectation, work assignments, and academic pressure, were found to associate with student academic stress. There is a significant difference between gender in experiencing examination expectations, and males experienced more academic stress than females. We also found a high difference between educational levels in experiencing exam expectation (the second year with the third and fourth year), work assignments (the first year with the second year), and academic pressure (the second year and the third year). According to these findings, psychological well-being among the students who participated in this survey significantly connected with academic stress throughout college. Additionally, unique resources and assistance should provide to some groups of college students who are more vulnerable to stress than others. BUUIC should implement an appropriate psychological skills training program to help students cope with stressful academic and real-life situations.

KEYWORDS: academic stress, Perception of Academic Stress, collegiate students, Exploratory Factor Analysis

1 INTRODUCTION

Stress among undergraduate and graduate students is multifaceted and results from academic and non-academic elements, such as sociocultural, environmental, and psychological characteristics (Brand & SchoonheimKlein, 2009). Some students may experience considerable increases in stress, particularly around test and exam times, which may lead to anxiety symptoms. Earlier studies showed that between 10 and 35 percent of college students suffer from functionally detrimental test anxiety (Chapell et al., 2005; NavehBenjamin et al., 1997). According to a growing body of studies, academic stress may be a significant factor in college (Bedewy & Gabriel, 2015; Dusselier et al., 2005; Elias et al., 2011; Misra et al., 2000; Pascoe et al., 2020; Reddy et al., 2018). For example, a poll of college students in the United

States found that up to 87% of them said their leading cause of stress came from their studies (Association). College students face new academic stresses, such as a heavy course load, much studying, time management, competitiveness in the classroom, financial worries, family responsibilities, and adjusting to a new environment (Bedewy & Gabriel, 2015; Byrd & McKinney, 2012; Ekpenyong et al., 2013; Freire et al., 2020; Karyotaki et al., 2020; Ketchen Lipson et al., 2015; Liu et al., 2019; Misra & Castillo, 2004; Pedrelli et al., 2015; Reddy et al., 2018). College dropout rates might rise due to academic stress, which can lower motivation and impede academic success (Pascoe et al., 2020). Most students' primary sources of stress were academic issues, which physical, social, and emotional ones then followed. Students who were under stress tended to score poorly on depression assessments and had low self-esteem in large proportions (Baste & Gadkari, 2014).

A significant stressor that has contributed to a crisis in mental health is the coronavirus disease 19 (COVID-19) pandemic (Association; Dong & Bouey, 2020). For college students, the COVID-19 pandemic has caused substantial changes and interruptions to everyday life, heightened stress levels, and decreased mental and physical health (Association; Clabaugh et al., 2021; Husky et al., 2020; Lee et al., 2021; Lopes & Nihei, 2021; Patsali et al., 2020; Salerno et al., 2020; Yang et al., 2021). In order to give assistance, resources, and mental health services on time, it is important to identify students who are most at risk.

2 RESEARCH OBJECTIVES

The purpose of this study was to explore the academic stressors of Burapha University International College (BUUIC) students after the Covid-19 pandemic with the following questions:

1. What is the level of academic stress of BUUIC students after the Covid-19 pandemic?
2. What factors caused academic stress for BUUIC students after the Covid-19 pandemic?
3. Are there any differences between gender in experiencing academic stress after the Covid-19 pandemic?
4. Are there any differences between educational levels in experiencing academic stress after the Covid-19 pandemic?

3 LITERATURE REVIEW

Academic stress results from students' stress due to things like scholarship requirements, family obligations, peer pressure, course-related stress, and financial problems (Misra & Castillo, 2004). For some students, it may also be a result of moving to new locations, where they have to adapt to new cultural norms and languages in addition to academic responsibilities (Mori, 2000). There is constant pressure on students to achieve better than their classmates. They often face comparisons with their siblings and students their age from their parents, teachers, and acquaintances. These students are inevitably left feeling confused and under continual pressure to do better, get higher grades, thrive in extracurricular activities, enrol in hobby courses, and other things. It noted that parents often place these unwarranted demands on their children to meet their unfulfilled needs, which they could not achieve for personal reasons. Teenagers nowadays are under peer pressure to participate in several activ-

ities outside of their scholastic pursuits so that their classmates would accept them into their groups. Students report low self-esteem, having trouble concentrating, and experiencing high stress due to unprecedented academic pressure. These factors all affect how well they do in school. Academic stress negatively influences their well-being, job choices, sleeping problems, psychosomatic symptoms, worrying about the future, comorbid disorders such as anxiety and depression, failure to handle course burdens, and so more (Acharya, 2003; Bedewy & Gabriel, 2015; Iqbal et al., 2015). Moreover, the pressure to get a job for college students is also a factor in their academic stress since they need to study and earn the degrees essential for their future careers (Kumaraswamy, 2013). Consequently, looking for a job is often a big concern and stressor for students.

Different college student groups perceive academic stress differently (Lee et al., 2021). In contrast to their male colleagues, female college students, for instance, report feeling more stressed (Eisenberg et al., 2007; Evans et al., 2018; Lee et al., 2021; Misra et al., 2000). Students of both genders react to pressures in various ways (Misra et al., 2000; Verma et al., 2011). Furthermore, non-binary students report more stress and mental health problems than their cisgender friends (Budge et al., 2020). It also showed that college students' academic years affect their stress levels (Defeyter et al., 2021; Elias et al., 2011; Liu et al., 2019; Misra et al., 2000; Wyatt et al., 2017). Only now, research still needs to address the educational levels impacted by academic stress. So, further research should conduct to fill this gap.

The COVID-19 pandemic has impacted higher education much like the rest of the globe. Because of precautionary measures, including social exclusion and lockdown, the virus has caused unprecedented disruption in the school system at all levels, harming the lives of students of all ages (Raza et al., 2021). Because of the COVID-19 pandemic's rigorous isolation regulations, students and teachers had no choice but only stayed home. It was challenging and very stressful for them to study in isolation, disrupting their social lives. Both teachers and students are missing the basis of group learning: group classroom activities. Along with the paradigm-shifting improvements in education, the COVID-19 pandemic also impacts students' mental health. Students' mental health problems, such as increased psychological stress, anxiety, and depression, seem global (Ihm et al., 2021). College students' general mood, wellness practices, and happiness drastically declined during the COVID-19 crisis (Copeland et al., 2021; Tinsley, 2020). Lyons et al. (2020) also highlighted the need to offer school-level intervention to support students' mental health because 68% of the medical student sample indicated a severe decline in mental health since the start of the COVID-19 pandemic.

The Perceptions of Academic Stress (PAS) Scale, created by Bedewy and Gabriel (2015), is an effective tool for assessing stress perceptions among college students. The University of Tanta in Egypt gave it to 100 students aged 19 to 26. According to exploratory component analysis, the scale's 18 questions were divided into four variables to assess how college students perceived academic stress and its causes. Students score each statement on a scale from 1 (strongly disagree) to 5 (strongly agree). According to Bedewy and Gabriel (2015), students from an Egyptian institution participated in the scale's creation and validation processes. An 18-item, five-point Likert-type scale, the Perceptions of Academic Stress Scale (PAS), was used to assess students' perceptions of academic stress and its causes. This questionnaire can use for both undergraduate and graduate students. With internal consistency, the response measured four dimensions: performance demands (0.6), workload and test perceptions (0.6),

self-perceptions (0.5), and time management (1 strongly disagree to 5 strongly agree) (0.6), with internal consistency reliability at 0.7. The answers to each instrument's question are combined to determine the PAS scores. A higher score on the PAS questions indicates less academic stress; the scores range from 18 to 90 (Bedewy & Gabriel, 2015).

As a result of the Covid-19 pandemic, this study served as the foundation for developing the most effective psychological skills training program for college students in general and BUUIIC students in particular. These interventions helped them to mitigate the mental distress brought on by academic stress. Implementing psychological skills training should assist college students in managing and minimizing mental health issues after the Covid-19 pandemic. So, this research had three purposes. First, to explore students' current academic stress levels after the COVID-19 pandemic. Second, to explore what factors caused students to them in order to implement an appropriate psychological skills training program to help students cope with stressful academic and real-life situations. Third, to determine which groups (gender, academic levels) would face various degrees of academic stress and mental health.

4 RESEARCH METHODOLOGY

Between April and May 2022, BUUIIC students participated in an online survey using Google Forms using the non-probability sampling approach. They answered the Perception of Academic Stress Scale (PAS) to determine their level of academic stress. During that period, 294 college students (aged 18 to 23) consented to participate in the research. Because the students voluntarily joined the research, the researcher let them know there would be no consequences if they left the survey at any point. There were 214 females, or 72.8%, compared to 80 men, or 27.2%. The percentages of first-year students were 62.2% (n = 183), followed by second-year students at 16.3% (n = 48), third-year students at 9.2% (n = 27), and fourth-year students at 12.2% (n = 36).

Statistical Analysis

The Perception of Academic Stress Scale, an 18-item questionnaire, examines the three primary academic stressors: academic expectations, workload and exams, and students' opinions of their academic performance. The results of each instrument's question are combined to get the PAS scores. The PAS questions range in scores from 18 to 90, with a higher score indicating lower academic stress levels (Bedewy & Gabriel, 2015).

Using SPSS 25, descriptive analysis assessed the demographics, such as gender, age, and educational levels. Principle component analysis and Varimax rotation identified the causes of students' academic stress factors. An independent t-test determined the gender differences in academic stress factors after the Covid-19 pandemic. One-way ANOVA and Post Hoc tests figured out if there were any significant changes in the educational levels of those who experienced academic stress after the Covid-19 pandemic.

5 RESULTS

Table 1 and 2 showed that 69 students (14 male and 55 female 23.47%) have experienced academic stress after the Covid-19 crisis classified as first year (n = 42, 14.3%), second year (n

sampling sufficiency for the study. A preliminary analysis was conducted to determine each component's eigenvalues in the data. Four variables that each had eigenvalues over Kaiser's threshold of 1 explained 67.42% of the variance. After rotation, Table 3 displays the factor loadings and composite reliability. Items that cluster on the same factor imply that factor 1 corresponds to "Academic confidence," factor 2 to "Examination expectation," factor 3 to "Work assignments," and factor 4 to "Academic pressure," respectively.

With composite reliability over 0.7, it was clear that all constructs were valid, and together they satisfactorily explained 61.32% of the variation in social sciences research (Hair Jr et al., 2021).

Table 4: Summary results of the independent sample t-test between gender

	Male (n = 80)		Female (n = 214)		t	P values
	Mean	SD	Mean	SD		
Academic confidence	3.44	0.891	3.62	0.843	-1.665	.097
Examination expectation	2.64	0.839	2.30	0.946	2.906	.004
Work assignments	2.59	1.117	2.64	1.090	-.339	.735
Academic pressure	3.15	0.801	3.14	0.787	.065	.949

There was a significant difference in "Examination expectation" between males (M = 2.64, SD = 0.839) and females (M = 2.3, SD = 0.946); $t(292)$, $p = 0.004 < .05$, and females have higher academic stress than males.

Table 5: Summary results of one-way ANOVA and Post Hoc test

	ANOVA		Post Hoc test
	F	Sig	
Academic confidence	1.930	.125	There is no difference in "academic confidence" between educational levels.
Examination expectation	4.415	.005	There are differences in "examination expectation" between the second year and third year (sig = 0.014); the second year and fourth year (sig = 0.025).
Work assignments	3.522	.015	There is a difference in "work assignments" between the first year and second year (sig = 0.042)
Academic pressure	2.032	.109	There is a difference in "academic pressure" between the second year and third year (sig = 0.047)

6 DISCUSSION AND CONCLUSIONS

The results explored that 23.47% (14 male and 55 female) had experienced academic stress after the Covid-19 pandemic, which showed as first-year (n = 42, 14.3%), second-year (n = 18, 6.1%), third-year (n = 2, 0.7%), and fourth-year (n = 7, 2.4%). This finding supports previous research which confirmed that a demanding course load, much studying, time management, classroom competition, financial concerns, family obligations, and acclimating to a new setting affect students' academic performance (Bedewy & Gabriel, 2015; Byrd & McKinney, 2012;

Ekpenyong et al., 2013; Freire et al., 2020; Karyotaki et al., 2020; Ketchen Lipson et al., 2015; Lin et al., 2019; Liu et al., 2019; Misra & Castillo, 2004; Pedrelli et al., 2015; Reddy et al., 2018). In addition, most students reported feeling stressed out because of the constant evaluations, the pressure to maintain excellent marks, and the lecturers' teaching methods. BUUIC can consider giving out a validated assessment in classlike the PASand teaching students how to self-rate themto increase awareness and understand how academic stress affects mental health. These findings help us understand how academic stress and mental health vary over time and enable tailored interventions for vulnerable groups.

After using factor analysis and varimax rotation, the study identified four academic stress factors that students must deal with after the Covid-19 pandemic, including factors 1 for "Academic confidence," 2 for "Examination expectation," 3 for "Work assignments," and 4 for "Academic pressure." In terms of "Examination expectation," there was a significant difference between males and females ($M = 2.64, SD = 0.839$ vs. $M = 2.3, SD = 0.946$); $t(292), p = 0.004 < .05$, and females experience more academic stress than males. The "Examination expectation" factor included seven statements: I fear failing courses this year, I think that my worry about examinations is weakness of character, The unrealistic expectations of my parents stresses me out, The examination questions are usually difficult, Examination time is short to complete the answers, Examination times are very stressful to me out, Even if I pass my exams, and I am worried about getting a job. It demonstrated the ongoing pressure on students to perform better academically than their peers and get a job after graduation. Also, their parents, teachers, and friends often compare them to their siblings and other students their age. The result is consistent with several studies showing that students of both genders respond to stress differently and that female students report feeling more stressed than male students (Eisenberg et al., 2007; Evans et al., 2018; Lee et al., 2021; Misra & Castillo, 2004; Misra et al., 2000; Verma et al., 2011). In order to increase students' psychological well-being and reduce stress, BUUIC may provide and instruct students to practice various beneficial stress management techniques.

Research still needs to be done on how academic stress affects educational levels. Therefore, further studies should conduct to close this gap. In this study, there is no difference in "Academic confidence" between educational levels. The "Academic confidence" factor has five statements: "I am confident that I will be a successful student, I am confident that I will be a successful in my future career, I can make academic decisions easily, The time allocated to classes and academic work is enough, and I have enough time to relax after work." It showed the level of confidence that students believed in themselves for academics. The results showed that some students might have confidence in their ability to manage time management, the competitiveness among classmates, the amount of content to be studied, the need to take tests, and the importance of maintaining a particular grade level.

Between second-year and third-year students, there are differences in "Examination expectation" ($\text{sig} = 0.014$); between second-year and fourth-year students, there are differences ($\text{sig} = 0.025$). The findings are consistent with earlier research showing that college students' academic years influence their stress levels and that various college student groups experience academic stress differently (Defeyter et al., 2021; Elias et al., 2011; Lee et al., 2021; Liu et al., 2019; Misra et al., 2000; Wyatt et al., 2017). One possibility is that third- and fourth-year students are under more pressure from their parents and themselves to perform better to get

better grades and be ready for the job market following graduation (Acharya, 2003; Bedewy & Gabriel, 2015; Iqbal et al., 2015; Kumaraswamy, 2013). For different educational levels, BUUIC may develop peer support groups and courses on campus that will lower stress and boost students' self-efficacy.

There is a difference in "Work assignments" between the first and second years ($\text{sig} = 0.042$). The "Work assignments" factor included two statements: "The size of the curriculum (workload) is excessive, and I believe that the amount of work assignment is too much." This result is much the same as many studies that some students might suffer significant stress increases, especially during test and exam periods, which may result in anxiety symptoms. College students encounter new academic challenges such as a significant course load, extensive studying, time management, classroom competition, and adapting to a new environment (high school to university) (Bedewy & Gabriel, 2015; Byrd & McKinney, 2012; Ekpenyong et al., 2013; Freire et al., 2020; Karyotaki et al., 2020; Ketchen Lipson et al., 2015; Liu et al., 2019; Misra & Castillo, 2004; Pedrelli et al., 2015; Reddy et al., 2018). Second-year students are more acquainted with and have experience with course administration, studying time, classroom competitiveness, and the university atmosphere than first-year students. BUUIC should create a more equal and inclusive atmosphere to encourage first-year students to seek mental health care.

The "Academic pressure" difference between the second and third years is significant ($\text{sig} = 0.047$). The "Academic pressure" factor included four statements: My teachers are critical of my academic performance, Teachers have unrealistic expectations of me, I am unable to catch up if getting behind the work, and Competition with my peers for grades is quite intense. Since second-year and third-year students had different academic workloads throughout their second and third years of study, this would happen. The finding was consistent with earlier research, which found that academic workload pressure raised stress levels due to the duty to complete excessive activities in a short time, study continually, and prepare for tests (Ulhaq et al., 2023). Other interventions such as cognitive-behavioral therapy, mindfulness meditation, and online coping tools proven to improve college students' coping abilities should provide for BUUIC students to mitigate the academic stress effect (Freire et al., 2020; Yusufov et al., 2019).

In conclusion, the findings revealed that 23.47% of respondents (14 male and 55 female) had had academic stress after the Covid-19 pandemic. Besides, four academic stress factors, comprising 1 for "Academic confidence," 2 for "Examination expectation," 3 for "Work assignments," and 4 for "Academic pressure," must be dealt with by students as a result of academic stress. In this research, males and females differed significantly in "Examination expectation." "Academic confidence" did not vary by educational level. There are variations in "Examination expectation" between second-year and fourth-year students ($\text{sig} = 0.025$), as well as between second-year and third-year students ($\text{sig} = 0.014$). Furthermore, the first and second years had different "Work assignments" ($\text{sig} = 0.042$). The "Academic pressure" between the second and third years is a significant difference ($\text{sig} = 0.047$). To help students manage their academic stress, BUUIC may provide and train them in using a variety of helpful stress coping mechanisms.

It is concerning that so many respondents reported feeling stressed out about their studies. As a result, the second part of this research will include eight weeks of psychological skill

training programs, which will last two weeks each in goal setting, imagery, arousal regulation, and positive self-talk skills. After the Covid-19 pandemic and during a period of personal instability, this program will assist students in managing their academic stress. Additionally, as part of the mental training offered by BUUIC, students will benefit from this study since the psychological skills training program will include into counselling services.

Certain limitations to this study should take into consideration. First, since a non-probability sampling approach was used to assemble the sample size, there is a risk that certain biases may exist in the replies. Moreover, the sample size is small, and the number of females and males is unequal. So, the results only reflect the study at that time and need more data for further research. Second, the study did not inquire about students' pre-existing mental health conditions, so the findings may not accurately reflect the severity of academic stress caused by the pandemic or pre-existing suffering. Lastly, as this research's target population was BUUIC students, the findings may only apply to some faculties or institutions in other cities or countries.

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